

IFW

PTO/SB/21 (09-04)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission 26

Application Number	09/690,354
Filing Date	October 17, 2000
First Named Inventor	Risto Miikkulainen et al.
Art Unit	2121
Examiner Name	Joseph P. Hirl
Attorney Docket Number	1039-0020

ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input checked="" type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Copy of Response to the Non-Final Office Action filed via facsimile 26 July 2004 w/Copy of Auto-Reply Facsimile Transmission dated 26 July 2004; Copy of Image File Wrapper
<div>Remarks</div> <p>CUSTOMER NO.: 34456</p> <p>SPECIAL PROCEDURES SUBMISSION</p>		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	TOLER, LARSON & ABEL, LLP		
Signature			
Printed name	John R. Schell		
Date	2-15-05	Reg. No.	50,776

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature			
Typed or printed name	Elise K. Dougherty	Date	2-15-05

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Risto Miikkulainen et al.

Title: SYSTEMS AND METHODS FOR ADAPTIVE MEDICAL DECISION
SUPPORT

App. No.: 09/690,354

Filed: 17 October 2000

Examiner: Joseph P. Hirl

Group Art Unit: 2121

Customer No.: 34456

Confirmation No.: 3110

Atty. Dkt. No.: 1039-0020-US

MS Petitions
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

**PETITION TO WITHDRAW HOLDING OF ABANDONMENT
SUBMITTED UNDER 37 C.F.R. 1.181(A)**

Dear Sir:

In response to the Notice of Abandonment dated 13 January, 2005, Applicants hereby petition the Director to withdraw the holding of Abandonment. This petition is submitted within two months from the date of the Notice of Abandonment.

CERTIFICATE OF TRANSMISSION/MAILING	
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to the Commissioner for Patents on <u>2-15-05</u> .	
<u>Elise K. Dougherty</u> Typed or Printed Name	<u>E.K. Dougherty</u> Signature

REMARKS

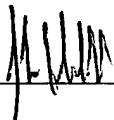
Applicants hereby petition for withdrawal of holding of abandonment in the above-identified application because Applicant's agent filed a timely response to the Office Action dated 24 March 2004. The USPTO issued a Non-Final Office Action dated 24 March 2004 relating to the above-identified application. Applicant's agent filed a Response to the Non-Final Office Action (Response) via facsimile transmission 26 July 2004, attached herewith. The USPTO provided an Auto-Reply Facsimile Transmission dated 26 July 2004 indicating receipt of the Response, also attached herewith, and Applicants have discovered that the Response has been posted to the Image File Wrapper (attached).

However, a Notice of Abandonment was issued 13 January 2005 alleging that no reply had been received to the Office Action dated 24 March 2004 and further stating that the Examiner discussed the application with an assistant of an attorney not of record.

As shown by the attached documentation and as asserted in the statement below, a reply was submitted to and was received by the USPTO. The USPTO should not rely on statements by an assistant to an attorney not of record. Therefore, Applicants respectfully request withdrawal of holding of abandonment in the above-identified application.

STATEMENT BY ONE OF PERSONAL KNOWLEDGE

I hereby attest that I, John R. Schell, sent by facsimile transmission on 26 July 2004 a Response to the Office Action dated 24 March 2004. I signed the Certificate of Transmission dated 26 July 2004 so indicating and received an Auto-Reply Facsimile Transmission from the USPTO indicating that the Response was received on 26 July 2004.



John R. Schell

CONCLUSION

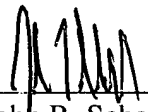
In response to the Notice of Abandonment dated 13 January 2005, Applicants hereby submit this Petition within two (2) months from the date of notice. One of personal knowledge attests to having sent by facsimile transmission on 26 July 2004 a response to the Office Action dated 24 March 2004. Applicants further submit additional evidence that the Response was sent to and received by the USPTO. Therefore, Applicants respectfully request withdrawal of the holding of abandonment and issuance of the claims.

Applicants do not believe that any additional fees are due, but if the Commissioner believes additional fees are due, the Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 50-2469.

Respectfully submitted,

2.15.05

Date



John R. Schell, Reg. No. 50,776
Agent for Applicant(s)
TOLER, LARSON & ABEL, L.L.P.
5000 Plaza On The Lake, Suite 265
Austin, Texas 78746
(512) 327-5515 (phone) (512) 327-5452 (fax)

Auto-Reply Facsimile Transmission



TO:

Fax Sender at 5123275452

Fax Information

Date Received:

7/26/2004 10:04:04 PM [Eastern Daylight Time]

Total Pages:

18 (including cover page)

ADVISORY: This is an automatically generated return receipt confirmation of the facsimile transmission received by the Office. Please check to make sure that the number of pages listed as received in Total Pages above matches what was intended to be sent. Applicants are advised to retain this receipt in the unlikely event that proof of this facsimile transmission is necessary. Applicants are also advised to use the certificate of facsimile transmission procedures set forth in 37 CFR 1.8(a) and (b), 37 CFR 1.6(f). Trademark Applicants, also see the Trademark Manual of Examining Procedure (TMEP) section 306 et seq.

Received
Cover
Page

=====>

07/26/2004 21:04	5123275452	TOLER LARSON & ABEL	PAGE 01/18
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**TOLER
LARSON
& ABEL**

FACSIMILE COVER SHEET

DATE: July 26, 2004

TO: Examiner Joseph P. Hirl FAX NO.: 703-872-9306
USPTO GPAU 2121

FROM: John R. Schell
Reg. No.: 50,776

RE U.S. App. No.: 09/690,354, filed October 17, 2000

Applicant(s): Risto Miikkulainen, et al.

Atty Dkt No.: 1039-0020

Title: SYSTEMS AND METHODS FOR ALPHABETICAL MEDICAL DECISION
SUPPORT

NO. OF PAGES (including Cover Sheet): 18

MESSAGE:

Attached please find:

☒ Transmittal Form (1 pg)
☒ Fee Transmittal (1 pg)
☒ Extension of Time (One-month) (1 pg)
☒ Response to Office Action (14 pgs)

DOCKETED
JUL 27 2004

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5000 Plaza On The Lake
Suite 305
Arlington, Texas 76010
Tel: (512) 327-5515
Fax: (512) 327-5452
www.tla-law.com

PAGE 1/18 RCVD AT 7/26/2004 10:04:04 PM [Eastern Daylight Time] * SVRUSPTO-EPXRF-10 * DRUS:728006 * CSD:5123275452 * DURATION (min):04:48

TRANSMISSION VERIFICATION REPORT

TIME : 07/26/2004 21:09
NAME : TOLER LARSON & ABEL
FAX : 5123275452
TEL : 5123275515
SER.# : BROB3J177273

DATE, TIME
FAX NO./NAME
DURATION
PAGE(S)
RESULT
MODE

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18
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■ TOLER
■ LARSON
■ & ABEL_{LLP}

FACSIMILE COVER SHEET

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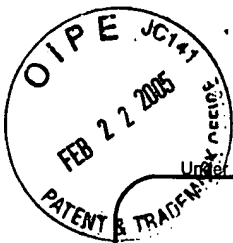
MESSAGE:

Attached please find:

- ☒ Transmittal Form (1 pg)
- ☒ Fee Transmittal (1 pg)
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PTO/SB/21 (02-04)

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

17

Application Number

09/690,354

Filing Date

October 17, 2000

First Named Inventor

Risto Miikkulainen

Art Unit

2121

Examiner Name

Joseph P. Hirl

Attorney Docket Number

1039-0020

ENCLOSURES (Check all that apply)

Fee Transmittal Form



Fee Attached



Amendment/Reply



After Final



Affidavits/declaration(s)



Extension of Time Request



Express Abandonment Request



Information Disclosure Statement



Certified Copy of Priority Document(s)

Response to Missing Parts/
Incomplete ApplicationResponse to Missing Parts
under 37 CFR 1.52 or 1.53

Drawing(s)



Licensing-related Papers



Petition

Petition to Convert to a
Provisional Application

Power of Attorney, Revocation



Change of Correspondence Address



Terminal Disclaimer



Request for Refund



CD, Number of CD(s) _____

After Allowance communication
to Technology Center (TC)Appeal Communication to Board
of Appeals and InterferencesAppeal Communication to TC
(Appeal Notice, Brief, Reply Brief)

Proprietary Information



Status Letter

Other Enclosure(s) (please
Identify below):

Remarks

Customer No.: 34456

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENTFirm
or
Individual name

John R. Schell, Registration No.: 50,776

Signature

Date

7.26.04

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Typed or printed name

John R. Schell

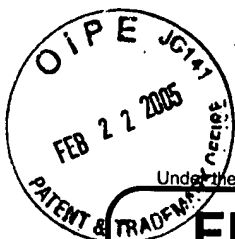
Signature

Date

7.26.04

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PTO/SB/17 (10-03)
Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 55.00

Complete if Known

Application Number 09/690,354
Filing Date October 17, 2000
First Named Inventor Risto Miikkulainen
Examiner Name Joseph P. Hirl
Art Unit 2121
Attorney Docket No. 1039-0020

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit
Account
Number
Deposit
Account
Name

50-2469

TOLER LARSON & ABEL LLP

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	

SUBTOTAL (1) (\$ 0.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	-20** =	X	
Multiple Dependent	-3** =	X	
		0	0

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ 0.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for <i>ex parte</i> reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	55.00
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 55.00

SUBMITTED BY

Name (Print/Type) John R. Schell

Registration No.
(Attorney/Agent)

50,776

(Complete (if applicable))

Telephone

512-327-5515

Signature

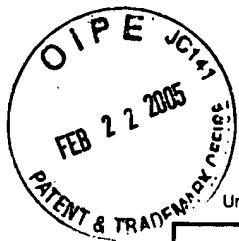
Date

7-26-04

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/22 (08-03)

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)		Docket Number (Optional) 1039-0020
In re Application of Risto Miikkulainen, et al.		
Application Number 09/690,354		Filed October 17, 2000
For SYSTEMS AND METHODS FOR ADAPTIVE MEDICAL DECISION SUPPORT		
Art Unit 2121		Examiner Joseph P. Hirl

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application.

The requested extension and appropriate non-small-entity fee are as follows (check time period desired):

<input checked="" type="checkbox"/> One month (37 CFR 1.17(a)(1))	\$ <u>110.00</u>
<input type="checkbox"/> Two months (37 CFR 1.17(a)(2))	\$ _____
<input type="checkbox"/> Three months (37 CFR 1.17(a)(3))	\$ _____
<input type="checkbox"/> Four months (37 CFR 1.17(a)(4))	\$ _____
<input type="checkbox"/> Five months (37 CFR 1.17(a)(5))	\$ _____

☒ Applicant claims small entity status. See 37 CFR 1.27. Therefore, the fee amount shown above is reduced by one-half, and the resulting fee is: \$ 55.00.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☒ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 50-2469.

I have enclosed a duplicate copy of this sheet.

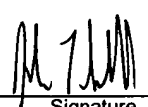
I am the ☐ applicant/inventor.

☐ assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed (Form PTO/SB/96).

☒ attorney or agent of record. Registration Number 50,776

☐ attorney or agent under 37 CFR 1.34(a).
Registration number if acting under 37 CFR 1.34(a) _____

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<u>7-26-04</u> Date	 Signature
<u>512-327-5515</u> Telephone Number	<u>John R. Schell</u> Typed or printed name

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

<input checked="" type="checkbox"/> Total of <u>1</u> forms are submitted.
--

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Risto Miikkulainen, et al.

Title: SYSTEMS AND METHODS FOR ADAPTIVE MEDICAL DECISION
SUPPORT

App. No.: 09/690,354

Filed: October 17, 2000

Examiner: Joseph P. Hirl

Group Art Unit: 2121

Customer No.: 34456

Confirmation No.: 3110

Atty. Dkt. No.: 1039-0020

Fee Amendment
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

RESPONSE TO OFFICE ACTION

Dear Sir:

In response to the Office Action mailed March 24, 2004, please amend the above-identified application as follows:

CERTIFICATE OF TRANSMISSION/MAILING	
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to the Commissioner for Patents on <u>7-26-04</u> .	
<u>JOHN R. SCHELL</u>	<u>[Signature]</u>
Typed or Printed Name	Signature

Specification Amendments

Please delete the Abstract and replace it with the following paragraph:

The current invention is directed to a system for adaptive medical decision support. The invented system provides a system that allows users to efficiently enter, access, and analyze medical information, without disrupting patient-doctor interactions or medical facility course of business; which assists in all stages of medical assessment and treatment; and which is tailored to the particular medical practice or specialty and taking into account the developing habits, preferences, performance, and individual patient histories, of an individual user. The invention provides a learning capacity configured to learn previously presented data and decisions and, for predicting predict data or decisions ~~that it will receive from a user,~~ based on data that ~~is has received~~ it receives from the user, thereby adapting its operations to the developing habits, preferences, performance, and individual patient histories of an individual user. The system may also provide a “virtual specialist” feature, whereby the system can be instructed to produce the probable actions or recommendations of particular medical specialists.

Claim Amendments:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A computer-implemented method for adaptively supporting medical decisions of at least one user, comprising:
 - a. receiving data at a host computer from a graphical medical record interface associated with a medical workflow, the graphical medical record implemented on a wireless portable interface device;
 - b. predicting at least one medical decision at the host computer based on the received data;
 - c. displaying the at least one predicted medical decision in the graphical medical record interface implemented on the wireless portable interface device;
 - d. receiving at least one user-decision from the at least one user via the graphical medical record interface; and
 - ~~e. wherein each user decision is a predicted medical decision or is not a predicted medical decision; and~~
 - ~~f. learning to predict the at least one user-decision using the host computer based on the received data and the at least one user-decision. from the data received.~~
2. (Original) The method of claim 1, wherein the step of receiving data further comprises receiving data via a wireless communication means.
3. (Original) The method of claim 2, wherein the wireless communication means is chosen from a group consisting of infrared signals, radio signals, and pulse codes.
4. (Canceled)

5. (Original) The method of claim 1, wherein the step of learning further comprises updating at least one learning module chosen from a group consisting of behavioral models, rule-based algorithms, learning-based algorithms, and neural networks.

6. The method of claim 1, wherein the step of learning further comprises customizing a plurality of operations to at least one parameter chosen from a group consisting of preferences of a user, habits of a user, medical specialties of a user, patient populations of a user, preferences of a group of users, habits of a group of users, medical specialties of a group of users, and patient populations of a group of users.

7. (Canceled)

8. (Canceled)

9. (Original) The method of claim 1, further comprising the step of executing the at least one user-decision, after the step of receiving the at least one user-decision.

10. (Original) The method of claim 1, further comprising executing the at least one predicted medical decision, before the step of receiving the at least one user-decision.

11. (Currently Amended) The method of claim 1, ~~further comprising displaying wherein~~ the graphical medical record interface includes an electronic medical chart graphical user interface.

12. (Original) A software program, embodied on a computer-readable medium, incorporating the method recited in Claim 1.

13. (Currently Amended) A method for adaptively supporting medical decisions of at least one user, comprising:

- a. receiving data at a host computer from a graphical interface implemented on an interface device;
- b. transmitting the data to at least one neural network;
- c. predicting at least one medical decision, via the at least one neural network based on the received data;
- d. displaying the at least one predicted medical decision in the graphical interface implement on the interface device;
- e. receiving at least one user-decision from the at least one user via the graphical interface implemented on the interface device;
- ~~f. wherein each user decision is a predicted medical decision or is not a predicted medical decision;~~
- g. learning to predict the at least one user-decision at the host computer based on the received data and the at least one user-decision from the data received; and
- h. wherein learning comprises updating the at least one neural network.

14. (Original) The method of claim 13, wherein the step of receiving data further comprises receiving data via a wireless communication means.

15. (Original) The method of claim 14, wherein the wireless communication means is chosen from a group consisting of infrared signals, radio signals, and pulse codes.

16. (Canceled)

17. (Original) The method of claim 13, wherein the step of learning further comprises customizing a plurality of operations to at least one parameter chosen from a group consisting of preferences of a user, habits of a user, medical specialties of a user, patient populations of a user, preferences of a group of users, habits of a group of users, medical specialties of a group of users, and patient populations of a group of users.

18. (Canceled)

19. (Canceled)

20. (Original) The method of claim 13, further comprising the step of executing the at least one user-decision, after the step of receiving the at least one user-decision.

21. (Original) The method of claim 13, further comprising executing the at least one predicted medical decision, before the step of receiving the at least one user-decision.

22. (Currently Amended) The method of claim 13, ~~further comprising displaying~~
wherein the graphical interface implemented on the interface device includes an electronic
medical chart graphical user interface.

23. (Original) A software program, embodied on a computer-readable medium,
incorporating the method recited in Claim 13.

24. (Currently Amended) A computer-implemented method for adaptively supporting medical decisions of at least one user, comprising

- a. receiving at least one first quantity of computer readable data associated with a medical workflow;
- b. receiving at least one user-decision associated with the medical workflow from a first at least one user via a graphical medical records interface;
- c. learning to predict the at least one received user-decision ~~from~~ based on the at least one first quantity of computer readable data received and the at least one user-decision by adapting a computer implemented prediction model;
- d. receiving at least one second quantity of computer readable data associated with the medical workflow;
- e. predicting at least one medical decision based on the at least one second quantity of computer readable data using the computer implemented prediction model, the at least one medical decision being associated with the medical workflow;
- f. displaying the at least one predicted medical decision via the graphical medical records interface; and
- g. receiving at least one second user-decision associated with the medical workflow via the graphical medical records interface.

25. (Currently Amended) The method of claim 24, wherein the step of receiving the at least one second quantity of computer readable data further comprises receiving data via a wireless communication means.

26. (Original) The method of claim 25, wherein the wireless communication means is chosen from a group consisting of infrared signals, radio signals, and pulse codes.

27. (Canceled)

28. (Original) The method of claim 24, wherein the step of learning further comprises updating at least one learning module chosen from a group consisting of behavioral models, rule-based algorithms, learning-based algorithms, and neural networks.

29. (Original) The method of claim 24, wherein the step of learning further comprises customizing a plurality of operations to at least one parameter chosen from a group consisting of preferences of a user, habits of a user, medical specialties of a user, patient populations of a user, preferences of a group of users, habits of a group of users, medical specialties of a group of users, and patient populations of a group of users.

30. (Original) The method of claim 24, wherein the method is implemented on at least one portable computing device.

31. (Original) The method of claim 24, wherein
the method is implemented on a host computer;
the host computer receives data from at least one portable computing device; and
the at least one portable computing device receives and displays output from the host
computer.

32. (Original) The method of claim 24, further comprising the step of executing the at least one user-decision, after the step of receiving the at least one user-decision.

33. (Original) The method of claim 24, further comprising automatically executing the at least one predicted medical decision, before the step of receiving the at least one user-decision.

34. (Canceled)

35. (Original) The method of claim 24, wherein the first at least one user comprises a specialist in a field of medicine.

36. (Original) The method of claim 24, wherein the first at least one user comprises a billing specialist or a coding specialist.

37. (Original) A software program, embodied on a computer-readable medium, incorporating the method recited in Claim 24.

38. (Currently Amended) A computer-implemented method for adaptively supporting medical decisions ~~of at least one user~~, comprising

- a. receiving a first quantity of computer readable data associated with a medical workflow;
- b. predicting a first at least one medical decision associated with the medical workflow based on the computer readable data, via at least one rule-based algorithm;
- c. displaying the first at least one medical decision in a graphical medical interface;
- d. receiving at least one user-decision associated with the medical workflow from a first at least one user via the graphical medical interface;
- e. learning to predict the at least one user-decision ~~from~~ based on the at least one user-decisions and the computer readable data received, wherein learning to predict the at least one user-decisions includes adapting the at least one rule-based algorithm;
- f. receiving a second quantity of computer readable data associated with the medical workflow via the graphical medical interface; and
- g. predicting, via at least one learning-based algorithm, a second at least one medical decision associated with the medical workflow based on the second quantity of computer readable data.

39. (Original) The method of claim 38, further comprising displaying the second at least one medical decision.

40. (Original) The method of claim 38, wherein the step of receiving the second quantity of computer readable data further comprises receiving the second quantity of computer readable data via a wireless communication means.

41. (Original) The method of claim 40, wherein the wireless communication means is chosen from a group consisting of infrared signals, radio signals, and pulse codes.

42. (Canceled)

43. (Original) The method of claim 38, wherein the method is implemented on at least one portable computing device.

44. (Original) The method of claim 38, wherein the method is implemented on a host computer; the host computer receives data from at least one portable computing device; and the at least one portable computing device receives and displays output from the host computer.

45. (Original) The method of claim 38, further comprising executing the first at least one medical decision, before the step of receiving the at least one user-decision.

46. (Original) The method of claim 38, further comprising the step of receiving a second at least one user-decision, after the step of predicting the second at least one medical decision.

47. (Original) The method of claim 46, further comprising the step of executing the second at least one user-decision, after the step of receiving the second at least one user-decision.

48. (Canceled)

49. (Original) The method of claim 48, wherein the step of learning further comprises updating at least one learning module chosen from a group consisting of behavioral models, rule-based algorithms, learning-based algorithms, and neural networks.

50. (Original) The method of claim 48, wherein the step of learning further comprises customizing a plurality of operations to at least one parameter chosen from a group consisting of preferences of a user, habits of a user, medical specialties of a user, patient populations of a user, preferences of a group of users, habits of a group of users, medical specialties of a group of users, and patient populations of a group of users.

51. (Original) The method of claim 38, further comprising

- a. predicting, via the at least one rule-based algorithm, a third at least one medical decision; and
- b. displaying at least one predicted medical decision, chosen from a group consisting of the second at least one medical decision, the third at least one medical decision, and both the second and third at least one medical decisions.

52. (Original) The method of claim 51, further comprising executing the predicted medical decision chosen from the group consisting of the second at least one medical decision, the third at least one medical decision, and both the second and third at least one medical decisions.

53. (Original) The method of claim 51, wherein the predicted medical decision chosen from the group consisting of the second at least one medical decision, the third at least one medical decision is selected by at least one user, and both the second and third at least one medical decisions, is selected by at least one user.

54. (Original) The method of claim 51, wherein the predicted medical decision chosen from the group consisting of the second at least one medical decision, the third at least one medical decision, and both the second and third at least one medical decisions, is selected by a computing device.

55. (Original) The method of claim 51, further comprising the step of receiving a second at least one user-decision, after the step of predicting the third at least one medical decision.

56. (Original) The method of claim 55, further comprising the step of executing the second at least one user-decision after the step of receiving the second at least one user-decision.

57. (Original) The method of claim 55, further comprising learning to predict the second user-decision from the second quantity of data received.

58. (Original) The method of claim 57, wherein the step of learning further comprises updating at least one learning module chosen from a group consisting of behavioral models, rule-based algorithms, learning-based algorithms, and neural networks.

59. (Original) The method of claim 57, wherein the step of learning further comprises customizing a plurality of operations to at least one parameter chosen from a group consisting of preferences of a user, habits of a user, medical specialties of a user, patient populations of a user, preferences of a group of users, habits of a group of users, medical specialties of a group of users, and patient populations of a group of users.

60. (Original) The method of claim 38, further comprising displaying an electronic medical chart graphical user interface.

61. (Original) The method of claim 38, wherein the first at least one user comprises a specialist in a field of medicine.

62. (Original) The method of claim 38, wherein the first at least one user comprises a billing specialist or a coding specialist.

63. (Original) A software program, embodied on a computer-readable medium, incorporating the method recited in Claim 38.

64. –72. (Canceled)

REMARKS

Applicants appreciate the time and efforts of Examiner Hirl, especially with respect to the interview of July, 8, 2004.

With respect to the Office Action's objection to the Abstract, Applicants have submitted a replacement Abstract.

With respect to the rejection of the claims 1-72 under 35 USC §101 and 35 USC §112, Applicants have amended claims 1, 11, 13, 22, 24, 25, and 38 and have canceled claims 4, 7, 8, 16, 18, 19, 27, 34, 42, 48, and 64-72. As such, Applicants respectfully submit that the claims and the application are now in compliance with 35 USC §101 and 35 USC §112.

With respect to the rejection of claims 2, 3, 5, 7, 8, 11, 12, 14, 15, 18, 19, 22, 23, 25, 26, 28, 30, 31, 34, 37, 39, 40, 41, 43, 44, 49, 58, 60, and 65-72 under 35 USC §102 based on Bishop. Applicants respectfully traverse the rejection.

The Office Action states that Bishop anticipates a wireless communications means and the wireless communication means consisting of infrared signals, radio signals, and pulse codes. Bishop, in fact, fails to teach or remotely suggest a wireless communication means or the wireless communication means consisting of infrared signals, radio signals, and pulse codes.

The Office Action states that Bishop anticipates at least one portable computing device. In fact, Bishop fails to teach or remotely suggest at least one portable computing device. In addition, Bishop fails to teach or remotely suggest a host computer receiving data from at least one portable computing device.

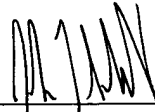
The Office Action states that Bishop anticipates an electronic medical chart graphical user interface. In fact, Bishop states that the display will be a standard GUI type interface and fails to teach or suggest an electronic medical chart graphical user interface.

Therefore, Applicants respectfully submit that Bishop fails to teach or suggest elements of the present claims. As such, Applicants respectfully submit that the claims are not anticipated by Bishop and are, therefore, allowable.

Applicant(s) respectfully submit that the present application is now in condition for allowance. Accordingly, the Examiner is requested to issue a Notice of Allowance for all pending claims. If, for any reason, the Office is unable to allow the Application on the next Office Action, and believes a telephone interview would be helpful, the Examiner is respectfully requested to contact the undersigned attorney or agent.

The Commissioner is hereby authorized to charge any fees that may be required, or credit any overpayment, to Deposit Account Number 50-2469.

Respectfully submitted,



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7.26.04

Date

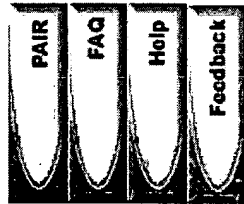


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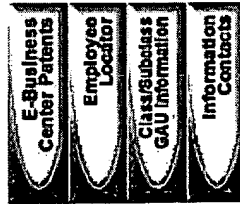


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07/26/2004	Applicant Arguments or Remarks Made in an Amendment	PROSECUTION	2	<input checked="" type="checkbox"/>
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11/14/2003	Information Disclosure Statement	PROSECUTION	5	<input type="checkbox"/>
10/14/2003	Miscellaneous Action with SSP	PROSECUTION	2	<input type="checkbox"/>

06/17/2002	Miscellaneous Action with SSP	PROSECUTION	2	<input type="checkbox"/>
11/02/2001	Petition Decision	PROSECUTION	1	<input type="checkbox"/>
11/01/2001	Miscellaneous Action with SSP	PROSECUTION	1	<input type="checkbox"/>
10/11/2001	Petition Entered	PROSECUTION	5	<input type="checkbox"/>
10/11/2001	Oath or Declaration filed	PROSECUTION	3	<input type="checkbox"/>
10/11/2001	Miscellaneous Incoming Letter	PROSECUTION	4	<input type="checkbox"/>
10/03/2001	Change in Power of Attorney (May include Associate POA)	PROSECUTION	6	<input type="checkbox"/>
06/05/2001	Miscellaneous Internal Document	PROSECUTION	1	<input type="checkbox"/>
10/17/2000	Fee Worksheet (PTO-875)	PROSECUTION	1	<input type="checkbox"/>
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